

LIBRARY
OF THE
UNIVERSITY OF ILLINOIS
16 MAR 1916

THE PROGNOSIS — OF — TUBERCULOSIS

...by...

JOHN J LLOYD, Jr., M.D.
CATAWBA SANATORIUM
VIRGINIA



REPRINTED FROM THE
VIRGINIA MEDICAL SEMI-MONTHLY
JULY 26, 1912

614.542
L 77p

LIBRARY
OF THE
UNIVERSITY OF ILLINOIS
18 MAR 1912

(Reprinted from the Virginia Medical Semi-Monthly, July 26, 1912)

THE PROGNOSIS OF TUBERCULOSIS.*

By JOHN J. LLOYD, Jr., M. D., Catawba Sanatorium, Va.

89a15 Nichols
"How long will it take me to get well?" or "Can I get well?" is the question we are usually called upon to answer as soon as we have diagnosed the case. It is because we each have to give a prognosis in every case of tuberculosis under our care that I have chosen this as the subject for this paper.

Prognosis includes any result from complete recovery, i. e., cure, to early death, timent effect very markedly the outlook for recovery. A nervous, high-strung temperament and a disposition prone to pessimism, and fretting at restraint, make a hard patient to deal with. On the other hand, the nervousness may be due largely to toxemia, and after a few weeks of rest these patients sometimes come to be excellent ones, and lend their full co-operation to the physician.

gence, a desire to get well, and force of char-

If the patient has a good degree of intelligence, a desire to get well, and force of character to stick at it in spite of seeming great obstacles, then we feel great hope for the future even in the presence of an advanced stage of the disease.

The saying—"None but the rich can afford to have tuberculosis"—has considerable truth in

*Read before the Piedmont Medical Society, at Charlottesville, Va., January 20, 1912.

it, for the life of a pulmonary invalid is of necessity a little more expensive, and his earning capacity usually reduced, but while this is true to quite an extent, the public generally is realizing more than ever before the terrible frequency of tuberculosis and employers are lending their aid to employees in helping them earn a living and at the same time retain their health. It is after a stay in a sanatorium that the hardest time comes for the tuberculous. They have exhausted their means and are not in shape to return to hard physical labor. That is the time for friends and philanthropists to come to their aid and tide them over the period of semi-recovery, when they are neither sick enough to be in a sanatorium, nor well enough to return to their usual work.

Many a woman is doomed to death from tuberculosis by having ignorant and foolish relatives. A man will take the bull by the horns and do what he is told in regard to dropping everything and trying to get well, but a woman under similar circumstances will bow to the wishes of relatives or, it may be, she is entirely powerless in the matter. When we meet opposition from ignorant relatives and friends, we are absolutely helpless until we can convince them or convince the patient in spite of them.

A change of surroundings and often a change of climate will in many cases produce wonderful results. This is a well known fact and one

which has been used in the treatment of all diseases from time immemorial. This is one reason for the existence of sanatoria, but their chief value is an educational one. In sanatoria patients are taught what is good and what harmful for them, and here they have other patients as object lessons. They also learn how to protect themselves and others from their sputum which is of such vital importance. It is a great mistake for the physician to tell his patient that a few weeks or months will cure him, for it always takes a long time.

The experience and personality of the physician count for a great deal, for there is no disease we are called on to treat which requires more tact, patience, and common sense than does tuberculosis. The patient discussion of symptoms, the many little details of every-day life, and the giving of explicit directions to cover any emergency in the future are among the duties of a physician treating tuberculosis. He must be willing to share the troubles and worries, and to keep posted on the symptoms of the patient, for it is often by the attention to little things that we are enabled to foretell and prevent some serious development.

So much for general considerations: now for the symptoms and findings:—

We learn considerable from the character of onset. Generally speaking, the more acute the onset the more virulent the infection or the

lower the resistance, and to a certain degree the reverse is true.

The stage of the disease at the time of diagnosis is perhaps the most important single point in prognosis. Recovery in incipient cases is estimated at from 60 to 80 per cent.; in moderately advanced, about 20 per cent., and in the far advanced very small indeed, perhaps less than one. The reason for this is readily understood when we recall the fact that the tuberculous focus at frequent intervals pours out fresh supplies of the invading bacilli to attack the tissues. This invasion is met by the defensive forces of the organism, the leucocytes, antibodies, lysins, etc., and if the defense is stronger than the offense, the process is limited, but in so doing the defensive products are used up more rapidly than the bacilli and the time will be reached, sooner or later, when the defensive forces are so weakened that an extension of greater or less degree occurs. Therefore, if the diagnosis is made early the chances for recovery are greatly enhanced.

The equation between the bacillary virulence and the individual resistance of the organism is a very interesting study and one which throws considerable light on the prognosis. An acute form of the disease is due to infection by a virulent strain of bacilli with normal or slightly lowered resistance, a more chronic type being due to bacilli of slight virulence and normal resisting power, or virulent bacilli and very great

resisting power, etc. The short thick bacilli are regarded as more virulent than the long slender ones.

The presence of a healed lesion in the opposite lung from the one which shows activity speaks for low virulence of bacilli and good resisting power on the part of the patient.

The activity present is roughly shown by the degree of moisture heard on auscultation, and, therefore, much moisture over the area involved is of bad prognostic significance. Involvement showing slight moisture speaks for fibrosis and carries a better prognosis.

With marked or rapid tissue destruction the outlook is grave.

The character and severity of symptoms is perhaps the chief point to consider, especially when taken together with the physical signs. Marked and rapid loss of weight is generally a bad prognostic sign, unless the patient has lived under bad conditions.

A pulse markedly out of proportion to the temperature, and which does not respond in a few weeks to absolute rest, is also a bad prognostic. The brunt of the burden in tuberculosis is placed upon the heart. The fibrous tissue changes in the lungs, the plugging of the numerous blood vessels and the displacement of the heart and tugging on it by adhesions, all form mechanical difficulties for it to overcome. In addition to this, it shares in the muscular

weakness of the body from the action of the toxins and has both these factors to contend with.

The temperature is of less value than the pulse, generally speaking, and usually subsides after a few months absolute rest, but occasionally we encounter a case in which high temperature persists even when the lung condition shows certain evidence of healing. These cases must be ones in which the heat controlling mechanism is faulty, and they do badly.

The power of food assimilation is of the utmost significance. We always feel hopeful when we find the patient possesses a good gastrointestinal tract, even in advanced cases. Very often gastric disturbances are symptoms of the disease, and promptly disappear after proper treatment is instituted, but some cases do well even when there is some organic or serious functional disturbance present.

Cough has very slight significance so far as prognosis is concerned.

Pleurisy is seen in practically all cases at sometime during the course of the disease, but unless dense adhesions form or it occasions continued pain, it is of slight significance. Pleurisy with effusion, unless purulent, does not to any extent modify the prognosis.

Pneumothorax is always a most serious complication.

Tuberculosis of the larynx, while always serious, is by no means a hopeless complication,

and if diagnosed early and properly treated, it often gives most satisfactory results. Tuberculous gastritis or enteritis is of the utmost gravity, although occasionally a patient does recover from it.

Nephritis, either acute or chronic, arteriosclerosis and congestive conditions of the liver, add greatly to the gravity of the situation.


Of the intercurrent acute diseases, pneumonia and grip are perhaps the most serious in their results.

The subject of prognosis may be briefly *summarized* under the following three heads:

1st. *Diagnosis*.—The earlier the diagnosis the better the prognosis, for with a slight involvement there usually goes good recuperative power.

2nd. *Patient*.—The optimistic individual possessed of a good degree of intelligence, who fully realizes the gravity of the situation, and who possesses a large amount of determination and will power, is the one in whom we may expect the best results.

3rd. *Physician*. Experience in the management of the disease and the careful attention to the details of treatment are of course essential, but hopefulness and cheerfulness on the part of the physician, add much toward the ultimate recovery of those who are otherwise doomed to hopeless invalidism.



Digitized by the Internet Archive
in 2017 with funding from
University of Illinois Urbana-Champaign Alternates



3 0112 072917823